User Guide



Do you need information about how to configure the XYFI, or how to change your WiFi password? Or do you want to know how to set up the access mode?

You will find it all in the User Guide!

Quick Start

Home

Settings

Notifications

LED

Languages

Web Browser Requirements

Restore your XYFI to factory settings

Mobile Administration Pages

Safety and Certification



1. Quick Start

Welcome to the XYFI user guide pages! In this chapter we have summarised the most important information in order to get you started more quickly.

A detailed overview of each function of the XYFI can be obtained in the other chapters of this documentation.

Insert SIM Card
Power Up XYFI
Connect to Internet
Connect to Administration Pages

1.1 Insert SIM Card

Before connecting the XYFI to you PC/tablet/smartphone etc. for the first time, you must insert the SIM card supplied by your service provider:

- 1) Remove the top cover of the XYFI.
- 2) Insert the SIM card and the optional micro-SD card into the corresponding card slots.
- 3) Put the top cover back on by inserting it into the slot at the front and press the cover down until it clicks into place.

1.2 Power Up XYFI

For XYFI to be able to connect to any Mobile or WiFi networks, it needs to be switched on. Before you connect it to a power source, you need to fully extend the unique USB connector (180 degrees) by pushing the button on the top of the XYFI.

XYFI can use several different power sources:

Computer: Insert the XYFI into a free USB port on your computer.

USB Power Adapter: Switch on the XYFI via the 110-240v power socket.

USB Cigarette Lighter Adapter: Use your XYFI in cars/boats/buses etc. or other places where you have a 12V cigarette lighter socket.

USB Battery Pack: When travelling, this is the ideal way to power the XYFI.

Others: Such as Car Stereo, Playstation, Wii etc. (with USB connection)...Please make sure that it offers min. 5V/1 Amp output power.

Note: You should only use the original USB Power Adapter/Cigarette Lighter Adapter and USB Battery Pack as replacement power sources may damage your XYFI and make it less reliable. Option NV is not responsible for damage caused by using non-Option NV products.

1.3 Connect to Internet

XYFI comes with pre-defined settings that makes it very easy for you to connect to the Internet:

- 1) Your XYFI is pre-configured with WPA2 encryption to protect unauthorised access. The unique Network Name (SSID) and WiFi Password (Pre-shared key) are printed on the manufacturing label underneath the bottom cover.
- 2) When your XYFI is switched on, find the Network Name (SSID) in your list of available networks and click Connect.
- 3) You will be asked to fill in the WiFi password, and when this is done, you are connected to the Internet.

If your PIN code is not disabled, or if it is not a known APN address, you will be guided to the settings pages to make the changes before being able to connect to the Internet.

International roaming is disabled by default, and if you use the XYFI for the first time in this situation, you need to enable roaming within the settings pages or manually click the connect button

1.4 Connect to Administration Pages

The administration pages give you access to see/edit all the settings for the XYFI, in addition to the connection status etc. In order to log in to the administration pages (valid both for desktop and mobile version):

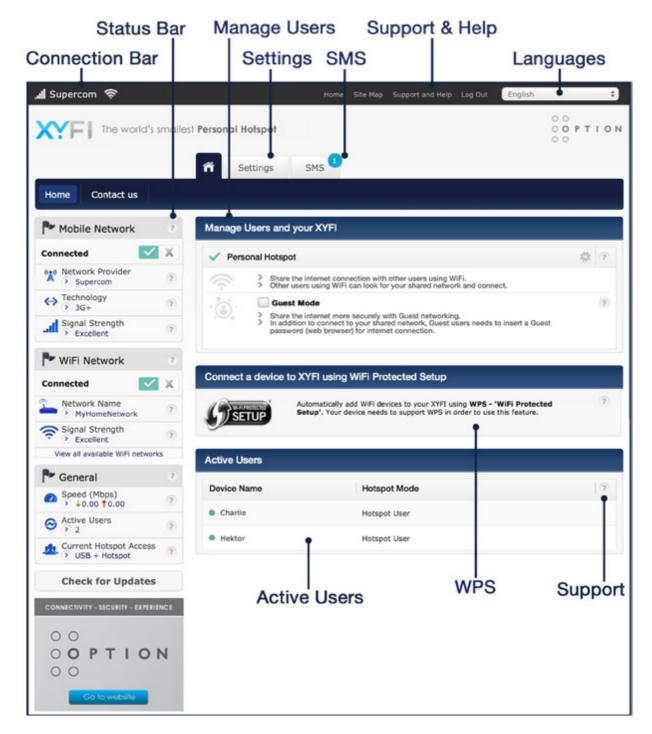
- 1a) Desktop: Open your Internet browser and type xyfi/ in the address bar (or 172.22.2.1) and press 'Enter'.
- **1b) Mobile (smartphone):** Open your Internet browser and type **xyfi/** in the address bar. If 'XYfi/' does not send you to the mobile site, type **m.xyfi/** (or **172.22.2.1**) and press 'Go'.
- 2) The Log In page will open and you have to create/insert your username and password (case sensitive) to enter the administration pages.

You can save this address as a bookmark in your browser or add to your home screen, for future use.

2. Home

This is your XYFI homepage where you can carry out basic connection settings.

Connection Bar Status Bar Manage Users and your XYFI Connect a device to XYFI using WiFi Protected Setup Active Users



2.1 Connection Bar

On the top left of the screen you can always see the type of connection XYFI is currently using.

The Mobile Network connection is shown to the far left and shows whether you are in range of the network and can connect to internet. The more bars, the stronger the signal. Next to the signal bar you will see the Network Provider. If there is no signal, this will not be shown.

Next to the Network Provider name you will see the current data connection (i.e. WiFi, 3G, EDGE, GPRS). If you are connected over WiFi (the more bars, the stronger the connection) this will always have priority over Mobile Networks for all data connection. You will still be able to receive SMS notifications over Mobile Networks.

2.2 Status Bar

The Status Bar gives you an easy access and a quick overview of your current connections.

Mobile Network WiFi Network General

2.2.1 Mobile Network

The Mobile Network status bar gives you an easy access and a quick overview of your current 2G/3G connection.

Establish or terminate the connection using the on/off button (soft button).

You can also establish or terminate the connection (physically), by pushing the LED button for less than 1 second.

Important - WiFi is always preferred over Mobile Network (3G/EDGE/GPRS) if both are connected. If you want to force Mobile data, you have to turn off WiFi or disconnect from whatever networks are in range.

Network Provider

The company that provides access to the Internet.

If the icons colour changes to violet (normally blue), it means you are in roaming mode using mobile network connection.

Technology

If you are connected to a mobile network, it will indicate if you have a 3G (HSPA) or a (slower) 2G (EDGE/GPRS) connection.

Signal Strength

To help you position the XYFI for best reception of the Mobile Network signal, we have included a signal strength monitor mode.

The signal strengths indicators move up as the strength of the signal increases and down as the signal decreases (only shown if you are registered to a network).

To increase the signal strength of your XYFI , try to move it slightly, or to movie it towards a window if you are connecting from inside a building.

If you continuously experience low signal strength in a certain area, it may be that the network coverage is insufficient there. Your operator or service provider can provide you with more information on network coverage.

If you believe that the problem may be with your XYFI rather than the network, please contact the dealer from whom you purchased XYFI.

2.2.2 WiFi Network

The WiFi Network status bar gives you an easy access and a quick overview of your current WiFi connection.

Green: WiFi Network is enabled and you are connected to a Network with Internet connection. XYFI will only be able to connect if the Network has Internet connection.

Orange: WiFi Network is enabled, but not connected to any Network.

Red: WiFi Network is disabled and will not connect to any Network.

If WiFi Network is enabled, it will always try to connect to remembered networks. If you not want the XYFI to automatically join WiFi Networks you can disable this feature here, by clicking 'No'.

Important - WiFi is always preferred over Mobile Network (3G/EDGE/GPRS) if both are connected. If you want to

force Mobile data, you have to turn off WiFi or disconnect from whatever networks are in range.

Network Name

The name of the network that provides access to the Internet.

Signal Strength

To help you position the XYFI for best reception of the WiFi Network signal, we have included a signal strength monitor mode on the front page.

The signal strength indicators move up as the strength of the signal increases and down as the signal decreases (only shown if you are connected).

To increase the signal strength of your XYFI, try to move it slightly, or to move it towards the network you are connecting from.

If you continuously experience low signal strength in a certain room or area, it may be that the coverage is insufficient there.

If you believe that the problem may be with your XYFI rather than the network, please contact the dealer from whom you purchased the XYFI

View all available WiFi networks

This gives you a quick link to view all the available WiFi networks

2.2.3 General

Here you can see the general information about XYFI

Active Users

Here you can see the number of active users currently connected to your XYFI.

To edit these connections, please see the middle of the home screen

Current Hotspot Access

Here you can see your current Hotspot Access mode:

'USB Only' - Only possible if XYFI is inserted in a Windows PC/Mac and drivers are installed:

When drivers are installed it will automatically enter the 'USB Only' access mode and will be the only device with this status.

Important! If you uncheck the 'Personal Hotspot' check box (only possible when in 'USB Only' access mode) the WiFi access will be turned off and no one will be able to connect via wireless to your XYFI.

USB + Hotspot: All the devices with the access mode 'USB Only' & 'Hotspot User' (over WiFi) will be able to connect to XYFI.

All devices with the access mode 'Guest User' will be blocked.

USB + **Hotspot** + **Guests:** All devices will be able to connect to XYFI.

However, the devices with the access mode 'Guest User' will in addition have to enter the 'Guest Password' if set by the administrator, before being able to connect to the Internet

2.3 Manage Users and your XYFI

In order to increase the security level for the XYFI, you can choose different access modes (settings can be set per device):

USB Only - Only possible if XYFI is inserted in a Windows PC/Mac and drivers are installed:

When drivers are installed it will automatically enter the 'USB Only' access mode and will be the only device with this status.

Important! If you uncheck the 'Personal Hotspot' check box (only possible when in 'USB Only' access mode) the WiFi

access will be turned off and no one will be able to connect via wireless to your XYFI.

Personal Hotspot: If this access mode is chosen (default when connected over WiFi), all the devices with the access mode 'USB Only' & 'Hotspot User' (over WiFi) will be able to connect to XYFI.

All devices with the access mode 'Guest User' will be blocked.

Guest Mode: If this access mode is enabled, all devices connected will be able to connect to XYFI.

However, the devices with the access mode 'Guest User' will in addition have to enter the 'Guest Password' if set by the administrator, before being able to connect to the Internet

2.4 Connect a device to XYFI using WiFi Protected Setup

Automatically add WiFi devices to your XYFI using **WPS - 'WiFi Protected Set-up'.** Your device needs to support WPS in order to use this feature.

WiFi Protected Setup (WPS) is a standard for easy and secure wireless network set-up and connections.

To use WPS, the device you wish to connect must support WPS and be compatible with WPA security (find out from your device manual if it supports the WPS feature).

WPS enables you to use push buttons or a PIN code instead of entering a network name (SSID) and WiFi password by hand.

Options for adding a WPS device:

Push button: You can either physically press the (LED) button on XYFI for 3 seconds or press the 'OK' button (soft button) in the administration pages. Then press the WPS button on the device you want to connect, and they will start pairing.

PIN (**Personal Identification Number**): The PIN to be entered is generated from the device you want to join up with the XYFI. Enter this PIN and they will start pairing.

Note: You have 2 minutes to complete WPS pairing and only one device can connect during this time.

WPS is only possible (and visible) if 'Personal Hotspot' is enabled.

2.5 Active Users

Here you will see all the users that are currently connected to your XYFI.

In order to edit each device, click on the device name: the complete line becomes blue:

Device Name: You can change the device name so it is easy for you to see which user/device is connected (instead of the device default name). The new name you choose will be remembered next time it makes a connection.

Access Mode: Here you can change the access mode between 'Hotspot User' and 'Guest User'.

Hotspot User: Typically, your own laptop and personal WiFi enabled devices (e.g. smartphone/tablet etc..) and a limited user group that often connects to the XYFI.

Guest User: This access mode adds another layer of security for you as an owner of the XYFI. In addition to the Network Name (SSID) & the WiFi Password (Pre-shared Key), the user also needs to know the 'Guest Password' which is set by you.

If a user/device is in the 'Guest User' access mode, he/she is sent to the XYFI home page to enter the password before being allowed to use the Internet.

If you have enabled 'Guest Mode', new devices connecting to the XYFI will become 'Guest User'. If 'Guest Mode' is disabled, they will enter the access mode 'Hotspot User'.

Remove/block devices: If you hover your mouse over a device name you will see two icons on the right. One is a trashbin and if you click this, the device will be removed from the XYFI. If you click the other icon, this user/device will be blocked/unblocked from the XYFI

3. Settings

Personal Hotspot Mobile Networks WiFi Networks Users and Devices About XYFI...

3.1 Personal Hotspot

The XYFI is your Personal HotSpot. Normally its settings 'out of the box' are just fine but on these pages you can adjust various things to make it yours, tweak its performance and security.

Hotspot WiFi Settings Advanced Settings

3.1.1 Hotspot WiFi Settings

XYFI let's you change the WiFi settings the way you want.

In order for your changes to take place, you need to click the 'Save Changes' button.

Changes here will disconnect all active users and they will need to reconnect.

Network Name (SSID)

The Network Name (SSID) is the name that you will see when your WiFi client lists networks. The name can be up to 32 characters long.

Broadcast Network (SSID)

Broadcast your Network Name (SSID): If you set the broadcast to 'Yes', then other devices can detect and connect to your WLAN.

Choose 'No' to disable broadcasting and hide the name of your network. This provides a higher security, as other devices have to know the Network Name (SSID) to connect. You can install the WLAN with this feature enabled and then disable it once you have set up XYFI and its associated wireless clients.

WiFi Password

We strongly recommend you to use WiFi password (WPA2) if it is available for your WiFi clients.

WiFi password (data encryption) possibilities:

No (no encryption): This option is not recommended except during installation of your network.

Yes: Connecting users can only join your XYFI using this password. Data encryption used is WPA2 (WiFi Protected Access).

Create your password for your connections. Both letters and numbers can be used.

The password must contain at least 8 characters (max. 63 characters).

WiFi Channel

The XYFI has 2 options for WiFi channel selection:

Auto - this means that the first time it is powered on, it will automatically select the WiFi channel that has the least amount of interference.

Manually - it can happen that surrounding networks are added and the initial WiFi channel may become crowded. Use the drop-down list and select a new channel.

Note: WiFi channels 1, 6 or 11 are usually the best selections.

3.1.2 Advanced Settings

Within this section you can enable/disable WPS setup and add Port forwarding.

Please make sure you understand what you are doing before adjusting these settings.

Port forwarding

Port forwarding allows remote computers, for example, computers on the Internet, to connect to a specific computer or service within a private local area network (LAN).

Common reasons to use port forwarding are for online gaming, internet applications, remote access to IP cameras, FTP and WEB servers etc.

You can add up to 10 port forwarding rules.

Name

Please insert a name (up to 15 characters) for your Port Forwarding...ex: MyCamera

(Only use the English letters a-z, A-Z and numbers 0-9)

Protocol

TCP (Transmission Control Protocol) - The way it works is the computer sending the data connects directly to the computer it is sending the data to, and stays connected for the duration of the transfer. The two computers can guarantee that the data has arrived safely and correctly, and then they end the connection

UDP (User Datagram Protocol) - The way it works is the computer sending the data packs the information into a nice little package and releases it into the network with the hopes that it will get to the right place. What this means is that UDP does not connect directly to the receiving computer like TCP does. Rather it sends the data out and relies on the devices in between the sending computer and the receiving computer to get the data where it is. This method of transmission does not provide any guarantee that the data you send will ever reach its destination.

TCP & UDP - Sometimes both protocols are needed to make a connection and this should be chosen.

ExternalPort

Enter the external port number you want to be used by XYFI.

You can also specify a range of ports. For example: 1-80 (maximum number of ports = 65535). If you use a range, it should be the same range used for the internal port.

Internal IPAddress

Enter the IP address of the device that should receive the requests.

InternalPort

Enter the internal port number you want to be used by the computer or Internet application.

You can also specify a range of ports. For example: 1-80 (maximum number of ports = 65535). If you use a range, it should be the same range used in the external port

3.2 Mobile Networks

The Mobile Networks section gives you access to the 2G/3G settings and SIM management.

Search for Network Mobile Network Settings Connection Method Manage PIN Unlock XYFI

3.2.1 Search for Network

XYFI gives you free choice of the available networks.

Automatic - the automatic setting is used by default. This means that the XYFI determines your network provider independently and uses the associated network.

Manual - if you activate the manual option, the XYFI shows you a list of the currently available networks. You can then decide which network you want to use or ignore by clicking on the box next to the respective provider. The list of available networks can be updated at any time by clicking on the 'Scan' button.

Note: If you select an external network that does not belong to your provider, additional costs may be incurred. Please ask your provider which mobile networks you can use.

3.2.2 Mobile Network Settings

The XYFI is usually configured from the factory with the correct settings of your Mobile Network Provider for accessing the internet over 3G.

If you change your SIM provider or if the default settings do not apply to your SIM, then this is where you can edit the APN, username and password.

APN

In order for XYFI to be able to connect to Mobile networks, it needs to have the correct APN (Access Point Name) that corresponds to the SIM provider. Normally the XYFI will automatically insert the APN (+ Username & Password) for you, if it is a known APN address.

To verify the proper APN information that needs to be filled in, please contact your SIM provider.

APN Username and Password

Leave Emtpy if APN address does not require username and password.

Username: To be filled in if your APN is associated with a 'Username' (defined by your SIM provider).

Password: To be filled in if your APN is associated with a 'Password' (defined by your SIM provider)

Network Type

Choose 2G or 3G as network type

Depending on the version, mobile networks support different transmission technologies. You can define your preferred transmission technologies using the 'Network Selection' option. The following facilities are available:

Automatic: XYFI independently determines the fastest transmission method and adapts the settings accordingly.

3G only: XYFI always uses 3G fast access via HSPA (High Speed Packet Access) or UMTS (Universal Mobile Telecommunications System). However, these are not available everywhere. If this setting has been activated, **no** connections will be made via 2G!

2G only: XYFI will always use EDGE (Enhanced Data Rates for GSM Evolution) or GPRS (General Packet Radio Service) Internet connections. This is slower than 3G, but are available almost everywhere. If this setting is activated, **no** connections will be made via 3G!

3.2.3 Connection Method

Choose your connection method

XYFI let's you change the connection method to suit your needs.

Connection method gives you the following choices:

Manually: Connect to the Internet by clicking 'Connect' on the Connection Status page in the management

console. You can also establish or terminate the connection (physically), by pushing the LED button for less than 1 second.

Automatic upon traffic: XYFI will automatically connect when you attempt to send data via the Internet.

Always connected: XYFI will connect to Internet as soon as it is powered up and will stay connected until it is powered down.

Please note that in order for your changes to take place, you need to click the 'Save Changes' button.

Inactivity timeout (in minutes)

In case of inactivity the XYFI will disconnect after your set timing.

You have to insert the inactivity time **in minutes**. Set it to 0 (zero) if you want the Internet to stay connected all the time.

The maximum is 1440 minutes (24 hours). Incoming traffic is treated as inactivity.

Auto Connect when Roaming

When travelling out of the country or operating near a country border you could be in a roaming situation. Roaming charges will apply and certain networks are more expensive than others.

If you do not want the XYFI to Auto Connect in roaming situations, please click the 'No' button (remember to Save Changes).

3.2.4 Manage PIN

Enable/Disable your PIN number

You can lock your SIM card (enabled) so that it can not be used without a Personal Identification Number (PIN). You must then enter the PIN each time you turn on the XYFI.

You can deactivate the PIN request by using the 'Disable' option.

Enter your PIN number

Please enter a SIM card PIN code (ex. 0234)

Where can I find my PIN number?

Please refer to your SIM card documentation or contact your carrier to find out what your default SIM PIN code is.

PIN number change

You can also change your PIN code directly via XYFI. To do this, enter the code in the line 'Current PIN'.

Then enter your new code in the first line and repeat the entry in the second line.

Confirm the change by clicking 'Save Changes'.

PUK

PUK (Personal Unlocking Key) - If you enter the PIN incorrectly three times, you may need to enter a Personal Unlocking Key (PUK) to enable your SIM card again.

Refer to the SIM card documentation or contact your carrier.

Note: Entering an incorrect PUK code too many times will result in the SIM becoming permanently locked. If this occurs, you will need to contact your carrier for a replacement SIM card.

3.2.5 Unlock XYFI

In case the XYFI is locked to a specific Internet Service Provider, it can be unlocked with a code that you need to get from your Internet Service Provider. Normally there are certain conditions that must be fulfilled to be able to unlock the device, but please contact your Internet Service Provider for details.

3.3 WiFi Networks

You can connect XYFI to a WiFi Network using one of the below methods. Known *online* networks will be joined automatically if this is enabled.

Scanning: This is the default method with a list over all available WiFi networks in range.

WiFi is always preferred over Mobile Network (3G/EDGE/GPRS). If you want to force Mobile data, you have to turn off (disable) WiFi or Forget whatever networks are in range.

You can enable/disable the WiFi networks by clicking the on/off button:

Green: WiFi Network is enabled and you are connected to a Network with Internet connection. XYFI will only be able to connect if the Network has Internet connection.

Orange: WiFi Network is enabled, but not connected to any Network.

Red: WiFi Network is disabled and will not connect to any Network.

If Smart Scan is enabled, it will always try to connect to remembered networks. If you do not want the XYFI to automatically join WiFi Networks you can disable this feature here.

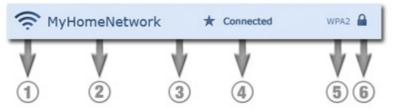
Smart Scan Scanning for WiFi Networks...

3.3.1 Smart Scan

XYFI will automatically join known networks that have internet connection if this is enabled. **Important!** It will not connect to any networks with no Internet access.

If you do not want XYFI to automatically connect to known networks or to networks with no Internet access, this needs to be disabled

3.3.2 Scanning for WiFi Networks...



This show you a list over available networks in your range.

- **1. Signal Strength:** Shows you the signal strength of the WiFi Network. The more bars the stronger the signal. If a network is shown in blue it means this network is in range and you can connect by clicking the network name. If the signal strength is grey with a 'X', it means you have previously connected to this network. It is currently not possible for you to connect to this network as it is out of range.
- **2. Network Name:** The name of the WiFi Network. If you are connected or previously connected to this network you will see the current status below.

After you have connected to a network it will remember your credentials and it will say 'Remembered' below the network name. Next time you will connect to this WiFi network, you will not be prompted for password.

- **3. Connect/Disconnect/Forget:** To connect/disconnect/forget a network, click the network name and choose accordingly. If you choose to 'Forget this Network', which means XYFI will automatically stop to join this network, it will reset the settings for this WiFi network, including the password.
- **4. Connected:** When connected to a network, the background colour of the network name will become blue and say Connected.
- **5. Security:** This will tell you what kind of security is implemented for the WiFi Network.
- 6. Padlock: Some WiFi networks require a password to join. Password-protected WiFi networks are indicated by

the padlock. If the padlock is unlocked, the WiFi network is unsecured.

3.4 Users and Devices

Within this section you can choose/edit who is able to connect to your XYFI.

Maximum number of users Organise your users and devices

3.4.1 Maximum number of users

You can allow access for up to a maximum of 8 users/devices connecting to your XYFI using WiFi at the same time.

3.4.2 Organise your users and devices

Here you have the possibility to see which devices that are currently connected/offline/blocked to your XYFI and edit/change access mode etc. per device.

Colour codes in front of each device:

Green: This device is currently connected to your XYFI.

Grey: This device has previously connected to your XYFI, but is now offline.

Red: This device is blocked and will not be able to connect to your XYFI until you 'unblock' it.

In order to edit each device, please click on the device name and the complete line becomes blue:

Device Name: You can change the device name so it is easy for you to see which user/device is connected (instead of the device default name). The new name you choose will be remembered next time it makes a connection.

Access Mode: Here you can change the access mode between 'Hotspot User' and 'Guest User'.

Hotspot User: Typically your own laptop and personal WiFi enabled devices (e.g. smartphone/tablet etc..) and limited user group that often connects to the XYFI.

Guest User: This access mode adds another layer of security for you as an owner of the XYFI. In addition to the SSID (Network Name) & the Pre-shared Key (WiFi Password), the user also needs to know the 'Guest Password' which is set by you. If a user/device is in the 'Guest User' access mode, he/she is sent to the XYFI landing page for password entry allowing access to internet.

If you want to change the **Default access mode** for new devices connecting to the XYFI it can be done at any time to either 'Hotspot User' or 'Guest User' in the 'Home Page'.

Remove/block devices: If you hover your mouse over a device name you will see 2 icons to the right. One is a trashbin and if you click this, the device will be removed from the XYFI.

If you click the other icon, this user/device will be blocked/unblocked from the XYFI.

Changes will only take place when you click the 'Save'-icon.

3.5 About XYFI...

Username & Password Local Network Settings Network Connections Firmware Update Restore XYFI About

3.5.1 Username & Password

Username

Here you can change your current username (case sensitive).

We recommend you to write down your new username and keep it in a safe place.

If you want to change your username (case sensitive), please overwrite the current one and click 'Save Changes'.

Password

Here you can change your current password (case sensitive).

We recommend you to write down your password and keep it in a safe place.

Enter your new password (case sensitive).

3.5.2 Local Network Settings

In some cases you would like to change the settings for your local network and this can be done here. Please make sure you understand what you are doing before saving any changes.

Admin URL (Hostname)

This is a 'Nickname' for your IP address. Instead of typing in the complete IP address in a Web-browser address bar (to access admin pages), you only need to type a URL (**not** case-sensitive). This URL is 'xyfi' and cannot be changed.

Admin IP Address

Acronym for 'Internet Protocol' address. This is the address to access the admin pages of the XYFI. Type the IP address in a Web-browser address bar and the admin log in pages will appear. The default IP address is 172.22.2.1.

IP is the protocol within TCP/IP (Internet protocol Suite) that is used to send data between computers over the Internet. An IP address is an assigned number used to identify a computer that is connected to a network through TCP/IP. An IP address consists of four numbers (each of which can be no greater than 255) separated by periods, such as 172.22.2.1.

Subnet Mask

A mask used to determine to what subnet an IP address belongs.

Typically, a subnet may represent all the machines at one geographic location, in one building, or on the same local area network (LAN). Having an organization's network divided into sub-nets allows it to be connected to the Internet with a single shared network address. Similar in form to an IP address and typically provided by an ISP.

An example of a subnet mask value is 255.255.0.0.

DHCP Range start

Allows a computer to join an IP-based network without having a pre-configured IP address. DHCP Range Start assigns unique IP addresses to devices using your start number.

DHCP Range end

Allows a computer to join an IP-based network without having a pre-configured IP address. DHCP Range End is the last unique IP addresses it will create.

DHCP Lease time

Each device will be assigned an IP address by the DHCP server for this amount of time, when it connects to the network. When the lease expires, the server will determine if the computer has disconnected from the network. If it has, the server may reassign this IP address to a newly-connected computer. This feature ensures that IP addresses that are not in use will become available for other computers on the network.

3 options for entering a value - \mathbf{s} (seconds), \mathbf{m} (minutes) or \mathbf{h} (hours). When inserting the value please enter \mathbf{s} , \mathbf{m} or \mathbf{h} behind the value...Examples 8s , 15m and 24h

3.5.3 Network Connections

Here you can view the current status of your network connection. Information available includes the type of connectivity, IP address, received and sent bytes and much more.

3.5.4 Firmware Update

This is where you can update your XYFI to have the latest firmware available. In order to download the latest firmware available, please click here: Latest XYFI Firmware

3.5.5 Restore XYFI

It is possible to restore the XYFI to its default/factory settings.

You do this by pressing the LED/WPS ('side') button on the actual XYFI device and **then** plugging it into a power outlet. Another possibility is to do this via the administration pages.

After approx. 15-20 seconds the LED will start to flash 'red' and 'green' and will continue for approx. 10 seconds. (It will only flash red/green when restoring using the physical LED button, not when using soft button).

When the LED becomes 'amber', the XYFI is restored to its factory settings.

3.5.6 About

Here you will see your current firmware version and other details about your XYFI.

4. Notifications

You can use XYFI to receive SMS notifications. The LED on XYFI lets you know when a new SMS notification, by blinking 'Amber'. The Notification tab within the administration pages will also include a badge with the number of received/unread notifications.

The SMS notifications will display the messages, with unread message in bold.

When you have read the SMS notification you can click on:

Delete: the SMS notification is permanently removed without confirmation

Previous: Read the previous SMS notification

Next: Read the next SMS notification

Back to SMS Notification: Takes you back to the sms notification overview

5. LED

The XYFI features a coloured LED with the following states:

No Light - Not switched on

Blue -> Red Solid - Power Up

Red/Blue/Green Flashing - Unregistered/scanning

Green Flashing - Registered 2G

Green Solid - Connected 2G

Blue Flashing - Registered 3G

Blue Solid - Connected 3G

Violet/Blue Flashing - Registered Roaming

Violet/Blue Solid - Connected Roaming

Blue Flashing (2 times then 1 second pause - repeatedly) - Connected to WiFi

Red Flashing (2 times then 1 second pause - repeatedly) - WPS connection is on

Amber Solid - SIM issue

Amber Flashing - SMS notification received

Red/Blue Flashing - Problem/Firmware crash

Red/Green Flashing - Restore to factory settings (LED will become 'amber' when done). It will only flash red/green when restoring using the physical LED button (not when using soft button).

6. Languages

Knowing foreign languages is always useful - and the same applies to XYFI, of course.

You can simply select a different language for XYFI in the language bar you can always find in the top right corner.

To change the languages, click on the box and select the required language.

7. Web Browser Requirements

To ensure the best possible user experience when using our advanced XYFI, you should use any of the browsers below. The newer the browser version you use, the better (minimum requirements can be seen below).

7.1 Cookies needs to be enabled

Your Web Browser cannot have Cookies disabled. In order for your to be able to log in to XYFI's admin pages you need to enable cookies in your Internet browser.

Follow these instructions to enable the Cookies in your Web browser:

Internet Explorer:

- 1) Click the Tools button, then Internet Options
- 2) Choose the Privacy tab.
- 3) Use the slider under Settings to 'Accept All Cookies'.
- 4) Apply the settings.

Firefox:

- 1) Click the Firefox button at the top left of the browser window.
- 2) Click Options (Mac > Preferences), then the Privacy tab.
- 3) Set 'Firefox will:' to Remember history.
- 4) Click OK

Safari:

- 1) Go to the Finder bar and select Safari.
- 2) Select the **Preference** option from the drop down menu.
- 3) Select the Security tab.
- 4) Set 'Accept cookies' to Always.
- 5) Close the Preference window

Chrome:

- 1) Click the Tools menu, then Select Options (Mac: Click the Chrome button at the top left then Preferences).
- 2) Click the Under the Hood tab.
- 3) Click Content settings in the 'Privacy' section.
- 4) Select Allow local data to be set to allow both first-party and third-party cookies.

8. Restore your XYFI to factory settings

It is possible to restore the XYFI to its default/factory settings.

You do this by pressing the LED/WPS ('side') button on the actual XYFI device and **then** plugging it into a power outlet. Another possibility is to do this via the administration pages.

After approx. 15-20 seconds the LED will start to flash 'red' and 'green' and will continue for approx. 10 seconds. (It will only flash red/green when restoring using the physical LED button, not when using soft button).

When the LED becomes 'amber', the XYFI is restored to its factory settings.

9. Mobile Administration Pages

XYFI's administration pages for mobile makes it easy to change basic settings and connect to any 3G network or Wireless Network.

Just open your Smartphone Internet browser and write 'xyfi' in the address bar. If 'xyfi' does not send you to the mobile site, write 'm.xyfi' (or 172.22.2.1) and press 'Go'.

Important! Cookies needs to be enabled on your mobile device to access the mobile admin pages.

(*Note:* In the mobile version the most frequently used settings can be changed. For a complete overview and advanced settings, please connect to the XYFI using a Windows PC/Mac.)

This will give you access to edit the following settings:

Personal Hotspot Mobile Networks WiFi Networks Access Mode Active Users Add WPS Device Status Admin Account Languages Full Version



9.1 Personal Hotspot

This provides the option to change the Name, Password your XYFI broadcasts and to change its WiFi Channel.

Network Name (SSID) 'the Service Set Identifier': Enter and/or change a name for your local wireless network (WLAN) (maximum 32 characters), e.g. *MyHomeNetwork*

Password: We strongly recommend you to use WiFi password if it is available for your WiFi clients. Connecting users can only join your XYFI using this password. Data encryption used is WPA2 (WiFi Protected Access).

Broadcast Network (SSID) - Enable/Disable your Network Name (SSID) visible to other people around you.

Choose WiFi Channel - Choose either *Automatic* (automatically select the WiFi channel with least amount of interference) or select one of the 11 WiFi channels available. Channels 1, 6 or 11 are usually the best selections.

9.2 Mobile Networks

This section gives you access to the Mobile Network settings:

APN (Access Point Name) - Defines the network path for all data services. To verify the proper APN information, please contact the carrier of the SIM card you are using.

APN Username & Password - To be filled in if required by your network operator.

Connection Method - You have 3 options:

- 1) Manually: Only connects to the Internet when you click the 'Connect' button.
- 2) Automatic upon traffic: Automatically connects only when you attempt to send data via the Internet.
- **3)** Always connected: Connects to the Internet as soon as it is switched on and will stay connected until it is switched off.

Auto Connect when roaming - When travelling out of the country or operating near a country border you could be in a roaming situation and be charged with expensive roaming charges. Here you can enable/disable this function.

Inactivity Timeout - When connection is set to 'Automatic upon traffic', this setting determines the duration after which the connection will be cut off upon inactivity.

9.3 WiFi Networks

You can connect XYFI to a WiFi Network using one of the below methods. Known networks connected to Internet will be joined automatically if the "Smart Scan' is enabled.

Scanning: This is the default method with a list of all available WiFi networks in range.

WiFi is always preferred over Mobile Network (3G/EDGE/GPRS). If you want to force Mobile data, you have to turn off (disable) WiFi or Forget whatever networks are in range.

You can enable/disable the WiFi networks by clicking the on/off button:

Green: WiFi Network is enabled and you are connected to a Network with Internet connection. XYFI will only be able to connect if the Network has Internet connection.

Orange: WiFi Network is enabled, but not connected to any Network.

Red: WiFi Network is disabled and will not connect to any Network.

Smart Scan:

XYFI will automatically join known networks connected to the Internet if this is enabled. **Important!** It will not connect to any networks that have no Internet access.

If you do not want XYFI to automatically connect to known networks or networks with no access to the Internet, this needs to be disabled.

Scanning:

This show you a list of available networks in your range.

- **1. Signal Strength:** Shows you the signal strength of the WiFi Network. The more bars the stronger the signal. If a networks is shown in blue it means this network is in range and you can connect by clicking the network name. If the signal strength is grey with a 'X', it means you have previously connected to this network. It is currently not possible for you to connect to this network as it is out of range.
- 2. Network Name: The name of the WiFi Network. If you are connected or previously connected to this network you will see the current status below.

After you have connected to a network it will remember your credentials and it will say 'Remembered' below the network name. Next time you will connect to this WiFi network, you will not be prompted for password.

- **3. Padlock:** Some WiFi networks require a password to join. Password-protected WiFi networks are indicated by a padlock. If the padlock is unlocked, the WiFi network is unsecured.
- **4. Security:** This will tell you what kind of security is implemented for the WiFi Network.
- **5. Connect/Disconnect/Forget:** To connect/disconnec/forget a network, click the network name and choose accordingly. If you choose to 'Forget this Network', which means XYFI will automatically stop to join this network, it will reset the settings for this WiFi network, including the password.
- **6. Connected:** When connected to a network, the background colour of the network name will become green and say Connected.

Manual Connection:

To be selected it you want to connect to a WiFi network with a hidden Network Name (SSID).

If you want to connect to a WiFi Network using the manual method, please fill in:

Network Name: Name of the WiFi network you want to join.

Security: Security standard being used of the WiFi network you want to join.

Password: Password of the WiFi network you want to join

9.4 Access Mode

In order to increase the security level for the XYFI, you can set the **Default access mode**, **Number of maximum users** and a **Guest Password**:

Default Access Mode - Defines the access mode for a new device connecting to your XYFI (2 options):

- **1)** Hotspot User: Typically, your own laptop and personal WiFi enabled devices (e.g. smartphone/tablet etc..) and a limited user group that often connects to the XYFI.
- **2)** Guest User: User/device needs to know the 'Guest Password' to access the internet (in addition to the SSID (Network Name) & the Pre-shared Key (WiFi Password).

Number of Users - You can allow access for a maximum of 8 users/devices connecting to your XYFI using WiFi.

Guest Password - Creates additional security as all the users/devices with the access mode 'Guest User' have to enter the 'Guest Password' before connecting to Internet. Both text and numbers can be used. The 'Guest Password' is valid as long as you wish, or until you change it.

9.5 Active Users

Here you have the option of seeing which devices are currently connected/offline/blocked to your XYFI and edit/change the access mode etc. for each device.

Colour codes in front of each device:

Green: This device is currently connected to your XYFI.

Grey: This device has previously connected to your XYFI, but is now offline.

Red: This device is blocked and will not be able to connect to your XYFI until you 'unblock' it.

Remove/block devices: The icon on the right enables you to remove, unblock/block a user/device.

In order to edit each device, please click on the '+' sign:

Device Name: You can change the device name so that it is easy for you to see which user/device is connected.

Access Mode: Here you can change the access mode between 'Hotspot User' and 'Guest User'.

9.6 Add WPS Device

Automatically add WiFi device to your XYFI using **WPS - 'WiFi Protected Setup'.** Your device needs to support WPS in order to use this feature.

WiFi Protected Setup (WPS) is a standard for easy and secure wireless network set-up and connections.

To use WPS, the device you wish to connect must support WPS and must be compatible with WPA security. WPS can automatically set up a random network name (SSID) and high-level WPA wireless security for computers, smart phones, tablets and other consumer electronics devices.

WPS enables you to use push buttons or PIN code instead of entering a Network Name (SSID) and WiFi password by hand.

Push button: The WPS button is either on the side of the XYFI (LED button) or a clickable button in the administration pages.

PIN (Personal Identification Number): The PIN can be viewed on the administration pages. The PIN is entered for the wireless device that wants to join the XYFI

9.7 Status

The Status bar gives you easy access and a quick overview of your current connection.

Mobile Network

Connect Button: Establish or terminate the connection

Network Service Provider: The name shown is the company that provides you with access to the Internet.

Network Signal Strength: The signal strength indicators move up as the strength of the signal increases and down as the signal decreases (*Only shown if you are registered with a network*).

WiFi Network

Connect Button: Enable or disable WiFi network.

Green: WiFi Network is enabled and you are connected to a Network with Internet connection. XYFI will only be able to connect if the Network has Internet connection.

Orange: WiFi Network is enabled, but not connected to any Network. **Red:** WiFi Network is disabled and will not connect to any Network.

If WiFi Network is enabled, it will always try to connect to remembered networks. If you not want the XYFI to automatically join WiFi Networks you can disable this feature here, by clicking 'No'.

Important - WiFi is always preferred over Mobile Network (3G/EDGE/GPRS) if both are connected. If you want to force Mobile data, you have to turn off WiFi or disconnect from whatever networks are in range.

Network Name: The name of the network that provides access to the Internet.

Signal Strength: The signal strength indicators move up as the strength of the signal increases and down as the signal decreases (*Only shown if you are connected to a network*).

View all available networks: This gives you a quick link to view all the available WiFi networks.

General

Speed (Mbps): Here you can see your current download and upload Internet speed, measured in Mbps (megabits per second -> data transfer speeds). The higher the number, the faster you will download or upload a file.

Active Users: Here you can see the number of active users currently connected to your XYFI. To edit these connections, please go to 'Active Users'.

Current Hotspot Access: Here you can see your current Hotspot Access mode.

USB + Hotspot: All the devices with the access mode 'USB Only' & 'Hotspot User' (over WiFi) will be able to connect to XYFI.**All** devices with the access mode 'Guest User' will be blocked.

USB + Hotspot + Guests: All devices will be able to connect to XYFI.However, the devices with the access mode 'Guest User' will in addition have to enter the 'Guest Password' if set by the administrator, before being able to connect to the Internet.

9.8 Admin Account

You can always change your account username & password by clicking the 'person'-icon top left. Remember it is case sensitive.

We recommend you to write down your password and keep it in a safe place.

9.9 Languages

You can always change the language of the XYFI : go to the bottom of the page, click on 'Change language' and choose your desired language.

9.10 Full Version

You can always visit the 'Full Version' to do additional changes.

Note that the desktop version is not optimized for your mobile device. We propose you visit the desktop version using Windows PC / Mac

10. Safety and Certification

C€0700 FCC ID NCMOGI0643 Safety & Certification

Your XYFI is like a mobile phone

Your XYFI uses the same technology as a mobile phone. It is important that you always obey all safety regulations related to mobile phone use. If you have any doubt about the safe operation of your XYFI you should remove the XYFI from the PC and seek advice from authorized personnel

Handle with care

This device is designed to be plugged directly into the USB port of a computer, however, every precaution should be taken to avoid stress on the device should the computer be lifted, moved, relocated or packaged. Should regular movement of this nature be envisaged, an extender cable (sometimes supplied with the device) should be used so as to avoid damage to the device. It should be noted that any damage sustained as a result of the aforementioned mishandling will be regarded as "User Damage" and shall render the product warranty null and voi

Safety Measurements

Please read the following guidelines carefully. Not following these guidelines can cause harm to the USB stick, yourself or other persons.

General recommendations for use

Always treat your product with care and keep in a clean and dust-free place. Do not expose your product to open flames or lit tobacco products.

Do not expose to liquid, moisture or humidity. Do not expose the XYFI to rain or other liquids.

Do not drop, throw or try to bend your product.

Do not paint your product.

Do not attempt to disassemble your product. Doing so may be dangerous and it will void the warranty.

Do not touch the antenna unnecessarily. (This is located either inside the product or as an external antenna.

Travelling:

Handle the USB stick with care while traveling. It is recommended to remove the USB stick from the laptop.

Ambient temperatures:

Do not expose the XYFI or the antenna to ambient temperatures beyond the range of 0 and +40 degrees Celsius

Explosive atmosphere:

Turn off your PC in any area with a potentially explosive atmosphere. It is rare, but your PC could generate sparks, which could cause an explosion or fire. Areas with a potentially explosive atmosphere are not always clearly marked. They include fuelling areas (petrol filling stations), below deck on boats, fuel or chemical transfer or storage facilities and areas where the air contains chemicals or particles, such as grain, dust, or metal powders. Do not transport or store your PC and accessories in the compartment of a vehicle which contains flammable gas, liquid or explosives

Blasting areas - construction sites:

Turn off your PC when in a blasting area in order to avoid interfering with two-way radios used in blasting operations.

Do not use on aircraft:

Using a wireless devices on aircraft can cause interference and is illegal. Remove your XYFI if you intend to use your PC whilst in an aircraft. Do not use it when the plane is on the ground without permission from the aircraft crew.

Do not use in hospitals:

Please ensure you follow any local regulations or rules. People are often asked to switch off all electronic devices in some areas of a hospital. This is a recommendation that Option® fully supports. Using the XYFI close to sensitive electronic devices could possibly result in interference. If you intend to use your PC in such areas, you must remove the XYFI.

Interference from radio signals:

Option® relies on advice from health authorities and relevant expert bodies about potentially undesirable reactions to radio emissions from the XYFI.

Immunity to interference:

Electromagnetic interference is the disturbance of the normal operation of a device due to its response to radio signals from

an external source. Occasionally, in some situations you may hear short sounds coming from audio equipment such as radio or multimedia PC. However, these audible signals do not interfere with the operation of the equipment. The Directive from the European Commission (2004/108/EC) governing all forms of electronic equipment concerns interference that such equipment produces, and its immunity to interference from outside. Any equipment compliant with that directive is unlikely to suffer interference. All wireless devices may get interference which could affect performance.

Cardiac pacemakers, implanted defibrillators & other medical implant devices

It is possible that the XYFI may interfere with some types of pacemakers or implanted defibrillators when operated close to the implanted device. You should seek advice from your doctor that is specific to the implant before using the XYFI. Health authorities in many countries have set up advisory services for medical devices and implants including providing advice about maintaining separation distance between the mobile device or other radio frequency equipment and the implant. Option® operating companies reflect the advice given by their relevant health authority or national advisory service, and as a minimum recommend a separation distance of at least 20 cm between the XYFI or other radio frequency terminal equipment and the embedded device.

Hearing devices:

People with hearing aids or other cochlear implants may experience interfering noises when using mobile devices or when one is nearby. The level of interference will depend on the type of mobile device, the type of hearing device and the distance between the two. Increasing the distance between the XYFI and hearing device may reduce interference

Children:

Do not allow children to play with your XYFI. They could hurt themselves or others, or could accidentally damage the XYFI. Your XYFI contains small parts with sharp edges that may cause an injury or which could become detached and create a choking hazard.

Driving:

The driver shall NOT use the XYFI while driving. Park the vehicle first

SIM cards:

To protect against damage from electrostatic discharge (ESD) do not touch the SIM card connectors. As a precaution, always make sure that the XYFI is already in your hand before you insert or remove the SIM card.

Accessories:

Only use Option® approved accessories. Do not connect with incompatible products. When used with accessories, Option® can only guarantee safe and correct operation of our products if the accessories are tested and approved by us

Safe distance:

The XYFI has been thoroughly tested to comply with SAR requirements. These tests simulate the absorption by the human body of radiation from the XYFI.

This device complies with the SAR regulation as stated by the FCC./nThe measurements were made according to the Supplement C to OET Bulletin 65 of the Federal Communications Commission (FCC) Guidelines [OET 65] for evaluating compliance of mobile and portable devices with FCC limits for human exposure (general population) to radiofrequency emissions. The device was tested in all applicable USB orientations with a separation of 5 mm to the flat phantom. The FCC guidelines define a limit of 1.2 W/kg averaged over a mass of 1 g for single platform devices, in this case a notebook platform.

This device complies with the SAR regulation as stated by the European Council Recommendation. The SAR limit as defined by the European Council Recommendation is 2.0 W/kg for a mass of 10g (European Council Recommendation 1999 519 EC), based upon ICNIRP guidelines. Details are available upon request.

For day-to-day use we would advise the user to keep a minimum distance from the antenna of 20 cm.

Users concerned with the risk of Radio Frequency exposure may wish to limit the duration of their calls and to position the antenna as far away from the body as is practical.

Certification requirements

Federal communications commission notice

FCC ID can be found on the label underneath the bottom cover. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, we cannot guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio or television technician for help.

Don't co-locate the device near to any other transmitters

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Option®, could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesirable operation

Exposure Information to Radio Frequency Energy

Users concerned with the risk of Radio Frequency exposure may wish to limit the duration of their calls and to position the antenna as far away from the body as is practical

Wireless LAN France

For 2.4GHz wireless LAN operation of this product, certain restrictions apply. This equipment may use the entire 2400 to 2483.5MHz frequency band (channels 1 through 13) for indoor applications. For outdoor use, only 2400 Mhz to 2454MHz frequency band (channels 1-9) may be used. For the latest requirements, see http://www.art-telecom.fr.

System requirements

USB 2.0 slot

Must be supplied by a SELV (Safety Extra Low Voltage) circuit with limited power

Manufacturer's disclaimer statement

The information in this document is subject to change without notice and does not represent a commitment on the part of the vendor. No warranty or representation, either expressed or implied, is made with respect to the quality, accuracy or fitness for any particular purpose of this document. The manufacturer reserves the right to make changes to the content of this document and/or the products associated with it at any time without obligation to notify any person or organization of such changes. In no event will the manufacturer be liable for direct, indirect, special, incidental or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

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To identify this product we refer to the Part, Series or Model number found on the product.

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